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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,674	07/30/2003	Johannes Menzel	A 91755	6480

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EXAMINER

BURCH, MELODY M

ART UNIT PAPER NUMBER

3683

DATE MAILED: 10/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/629,674

Applicant(s)

MENZEL ET AL

Examiner

Melody M. Burch

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-10 and 1219 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-10 and 12-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 18 and 19 are objected to because of the following informalities: the phrase "the turns" should be changed to --turns-- in line 3 from the bottom of claim 18.

The remaining claims are objected to due to their dependency from claim 18.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 3, 6, 7, 17, 18, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 3141660 to Clarke et al.

Re: claims 3, 17, 18 and 19. Clarke et al. show in the figure an antivibration element comprising: a coil spring 10 subject to deformation under load during operation of the antivibration element, the coil spring defining a longitudinal axis and having an end section, a midsection, and a transition section extending from the end section to the remainder, a guide member 12 having a helically shaped guide slot wherein turns of the coil spring are guided, the end section and the transition section being guided in the guide slot, the end section being fixed in the guide slot, the helically shaped guide slot having a base and the transition section being guided in the guide slot with a first play to the base measured in radial direction as shown, the guide slot having first and second

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flanks delimiting the slot in the axial direction of the longitudinal axis, and the transition section having a second play to the first flank in the axial direction and a third play to the second flank also in the axial direction as shown with the plays becoming overcome during the deformation under load so as to permit the turns of the transition section to lie at least in part against the guide slot thereby increasing the stiffness of the coil spring.

Re: claims 6 and 7. Clarke et al. show in the figure the limitation wherein the coil spring has first and second ends (radial ends – one radial end shown at the radially outermost section of the right top coil and the other radial end shown at the radially outermost section of the left bottom coil) twisted relative to each other by approximately a half turn.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clarke et al. in view of US Patent 4886250 to Lucas.

Clarke et al. describe the invention substantially as set forth above, including the coil spring having a plurality of turns, but does not disclose the specific number of turns claimed.

Lucas teaches in col. 7 lines 16-17 that the firmness of a spring is adjusted by changing the number of turns.

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the number of turns of the end section and the transition section of the spring of Clarke et al. to have been greater than approximately 1 1/4 turns and in a range of approximately greater than one turn to four turns, as best understood, in view of the teachings of Lucas, in order to adjust the firmness of the spring in the particular spring areas to achieve desired damping characteristics as best determined by the spring application.

Examiner also notes that it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable range involves only routine skill in the art. In re Aller, 105 USPQ 233.

Also it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

6. Claims 2, 8, 9, 12, 13, 14, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clarke et al. in view of US Patent 4712778 to Newman.

Re: claim 2. Clarke et al. describe the invention substantially as set forth above, but do not include the limitation wherein the end section is fixed form tight on the guide slot.

Newman teaches in figure 3a the limitation wherein the end section of an antivibration element is fixed form tight on a guide slot as shown between elements 45 and 49.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the end section of Clarke et al. to have been fixed form tight on the guide slot, as taught by Newman, in order to provide a means of more securely attaching the spring to the slot to prevent inadvertent slipping out.

Re: claims 8 and 9. Clarke et al. describe the invention substantially as set forth above, but do not show the limitation wherein of a second guide slot and second guide member.

Newman teaches in figure 3a the use of two guide members with guide slots wherein the guide members are configured as plugs.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the antivibration element of Clarke et al. to have included a second guide member, as taught by Newman, in order to provide a means of supporting the second end of the spring.

Re: claim 12. Clarke et al., as modified, show in the figure of Clarke et al. the spacing of the base of the guide slots to the longitudinal center axis becoming less with increasing distance from the end section from the bulge of the base down to the tapered portion of the base.

Re: claims 13 and 14. Clarke et al., as modified, teach in figure 3a of Newman the guide slots having a trapezoidally shaped cross-section.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the shape of the slots of Clarke et al. to be trapezoidally shaped, as taught by Newman, in order to provide a means of better

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accommodating a spring depending on the shape of the spring and the particular spring application.

Also, in *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966) the court held that the configuration of a claimed object was a matter of choice which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the particular configuration is significant.

Re: claim 15. Examiner notes that it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable range involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

7. Claims 8, 9, 10, 12, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Clarke et al.* in view of US Patent 1878128 to *Griswold*.

Re: claims 8-10 and 16. *Clarke et al.* describe the invention substantially as set forth above, but do not show the limitation wherein of a second guide slot and second guide member.

*Griswold* teaches in figure 2 the use of two guide members with guide slots wherein the guide members are configured as plugs.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the antivibration element of *Clarke et al.* to have included a second guide member, as taught by *Griswold*, in order to provide a means of supporting the second end of the spring.

Re: claim 12. *Clarke et al.*, as modified, show in the figure of *Clarke et al.* the spacing of the base of the guide slots to the longitudinal center axis becoming less with

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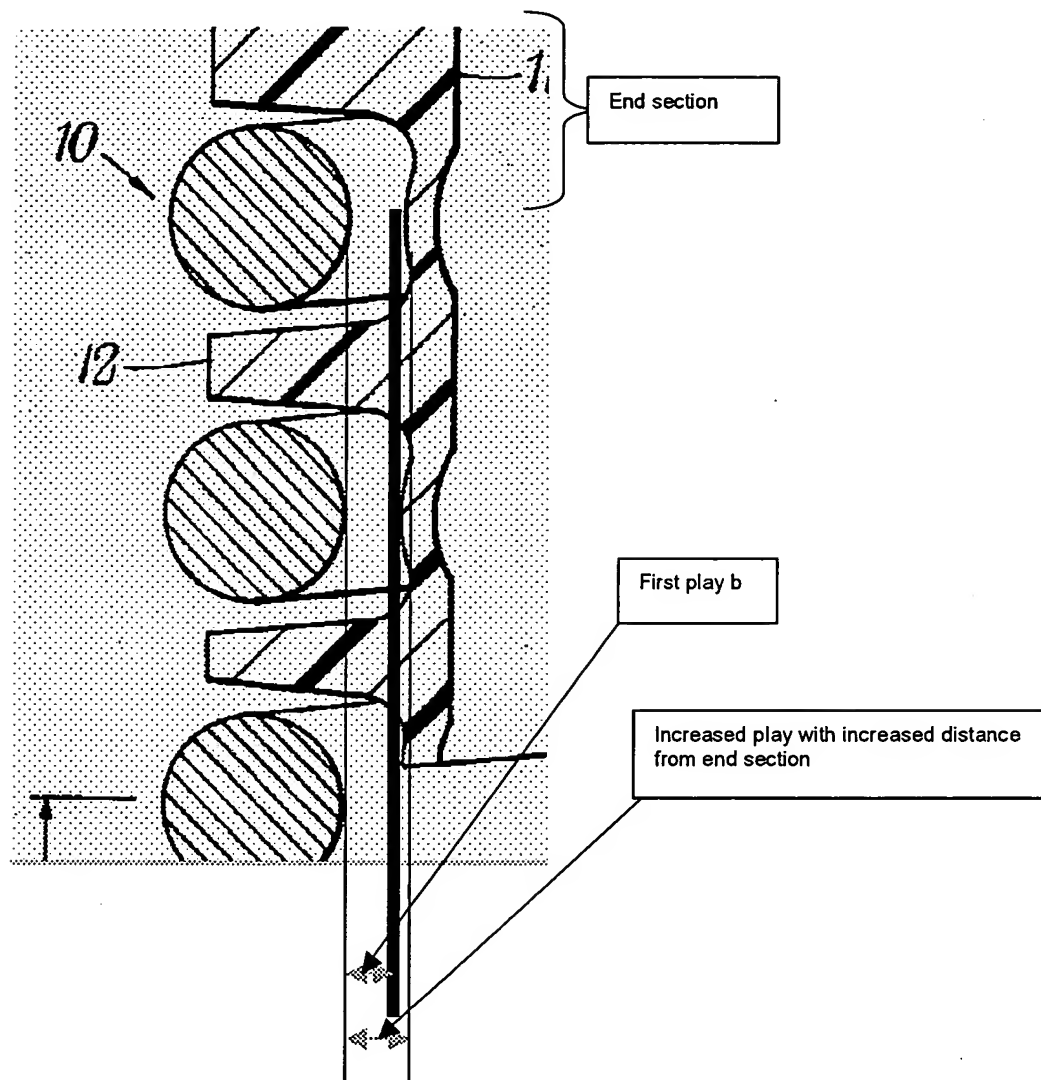
increasing distance from the end section from the bulge of the base down to the tapered portion of the base.

***Response to Arguments***

8. Applicant's arguments filed 8/10/05 have been fully considered but they are not persuasive.

See Next Page.





Examiner notes that Clarke et al. show in the labeled version of the figure above the limitation of a first play b increasing with increasing distance from the end section towards a transition section to a certain extent (note the second pair of double arrows labeled increased play with increased distance from end section).

With regards to claims 4 and 5, Examiner notes that In re Aller teaches that

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where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable range or the range of values most appropriate for the number of turns of the antivibration element involves only routine skill in the art. Additionally, the Lucas reference teaches that it is old and well-known in the art to adjust the number of turns of an antivibration element depending on application in order to adjust the firmness of the antivibration element. Applicant argues that Lucas does not suggest the support of turns of the coil spring with play on a guide member. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Lucas is used solely regarding the teachings surrounding the number of coils. The office action does not depend on Lucas for the limitation of the coil spring being supported with play on a guide member since this limitation is already satisfied by Clarke et al.

Similarly, Griswold is simply used for the teaching of supporting one end of the coils of a spring element with a second guide member. Since Clarke et al. also includes an end of a coil spring being supported by a guide member, the two references are not unrelated.

The rejections regarding the Kalister reference are moot since the rejections using the reference have been withdrawn.

For the reasons set forth above, the rejections have been maintained.

***Conclusion***

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melody M. Burch whose telephone number is 571-272-7114. The examiner can normally be reached on Monday-Friday (6:30 AM-3:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James McClellan can be reached on 571-272-6786. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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October 19, 2005

*Melody M. Burch*

*Melanie Torres*  
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*Primary Examiner*

*10-27-05*